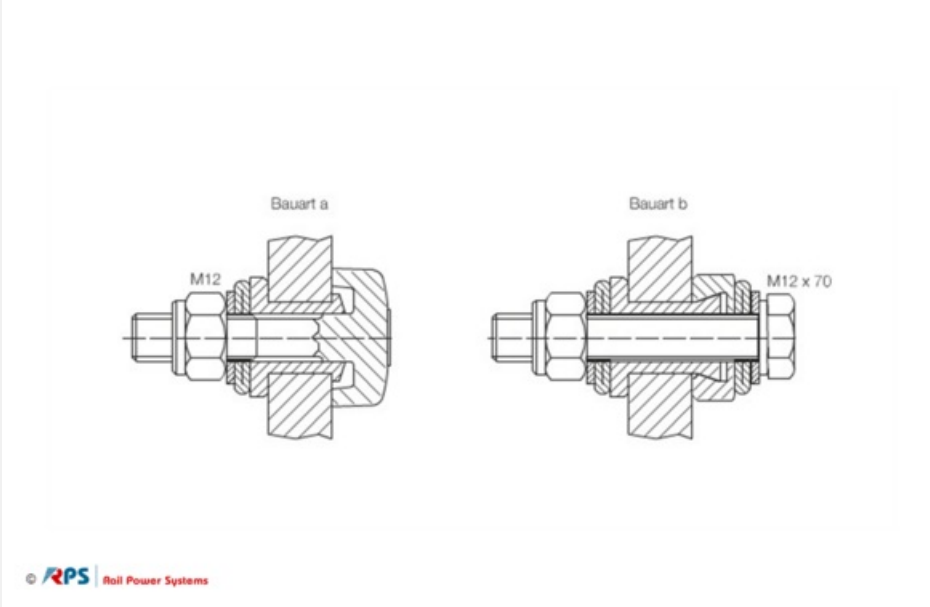


Protection and Earthing

Connection to rail for S 49, S 54, UIC 60 and R 65

For S 49, S 54, UIC 60 and R 65.



Material-ID	Name	Build Type	Weight	Drawing Number
3EGF010525	Rail contact system	a	0,16 kg	Ebs 15.03.23 a Bl. 1
3EGF010885	Rail contact system	a	0,16 kg	Ebs 15.03.23 b Bl. 1
3EGF011089	Rail contact system	b	0,25 kg	Ebs 15.03.23 d Bl. 1
3EGF010881	Rail contact system	DSK 19/18		Ebs 15.03.23 e Bl. 2

Low Voltage Limiter HVL 120-0.3

Component: HVL 120-0.3

For DC systems.

For public safety and equipment protection.

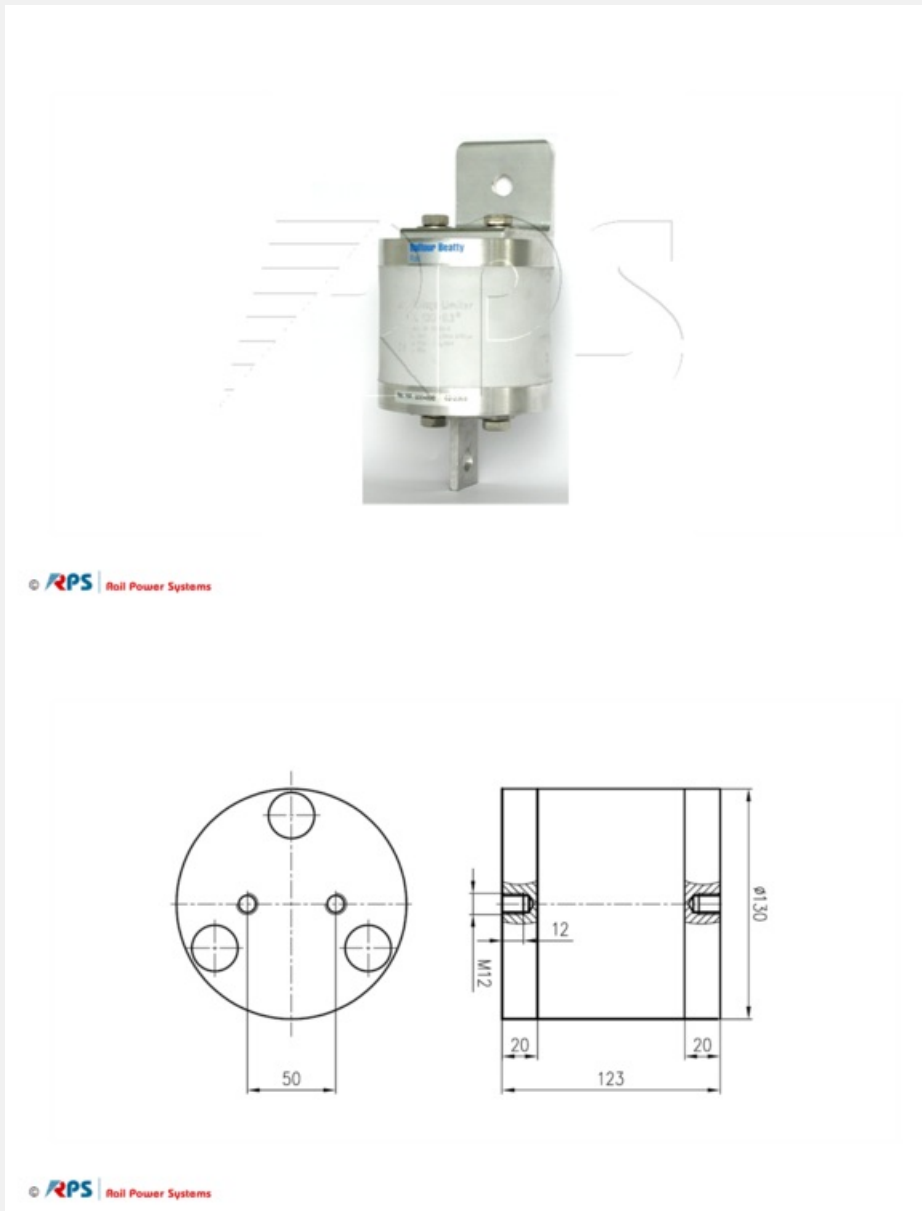
EN 50 122-1/EN 50123-5

The low voltage limiter HVL consists of a metal oxide varistor and two thyristors in antiparallel connection.

Short-time overvoltages with a duration of less than 0.4 ms are limited by the metal oxide resistor. Due to the thyristors voltages with a duration of 0.4 ms or more are limited to 3 V.

The maximum voltage in accordance with EN 50123-5, table 5.2, can be reduced or increased on request as the case arises.

Including fittings (tee and angle).



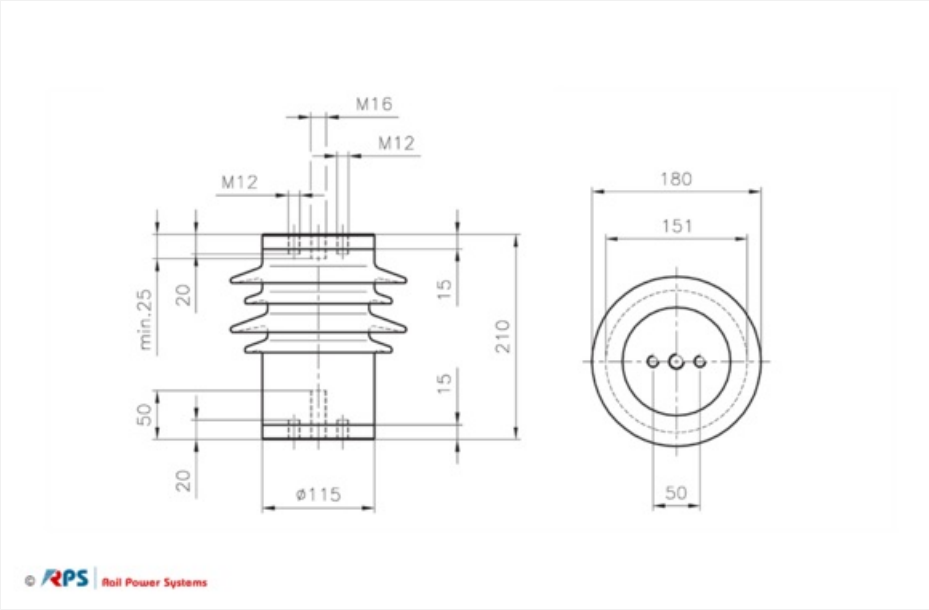
Material-ID	Name	Build Type	Weight	Drawing Number
3EGF012420	Low voltage limiter	120 V	3,8 kg	1HC0019144

Surge Arrester Type POLIM-H

For DC systems (indoor and outdoor installation)

silicone rubber casing.

Fadenlänge: 176 mm



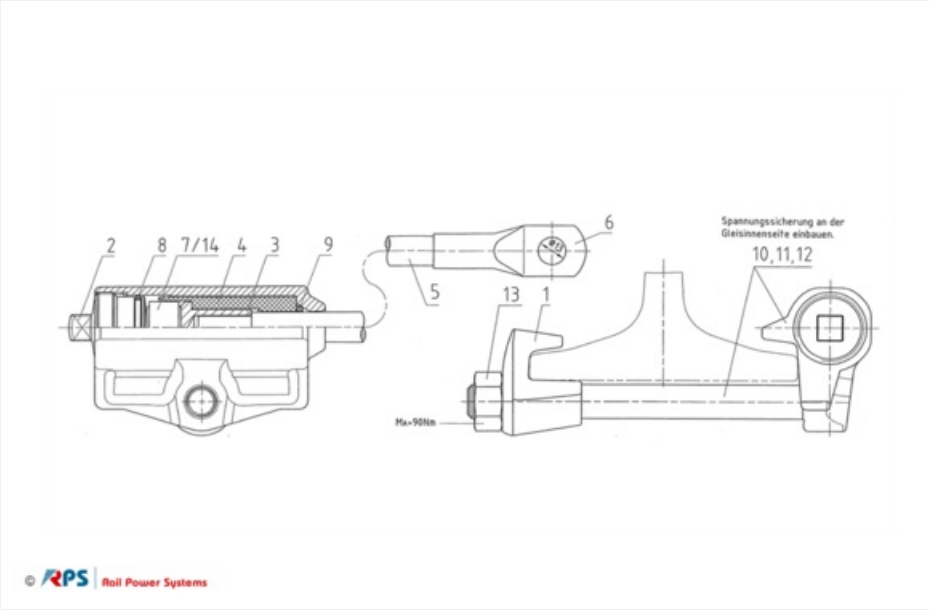
Material-ID	Name	Build Type	Weight	Creepage Path	Rated impulse withstand voltage	Drawing Number
3EGF011037	Surge arrester	POLIM-H 1 ND	6,1 kg	327 mm	1,0 kV	HAWA481453
3EGF011718	Surge arrester	POLIM-H 1 ND	6,2 kg	327 mm	1,5 kV	HAWA481453

Voltage limiter

For rail fastening.

Including earth wire 50 mm².

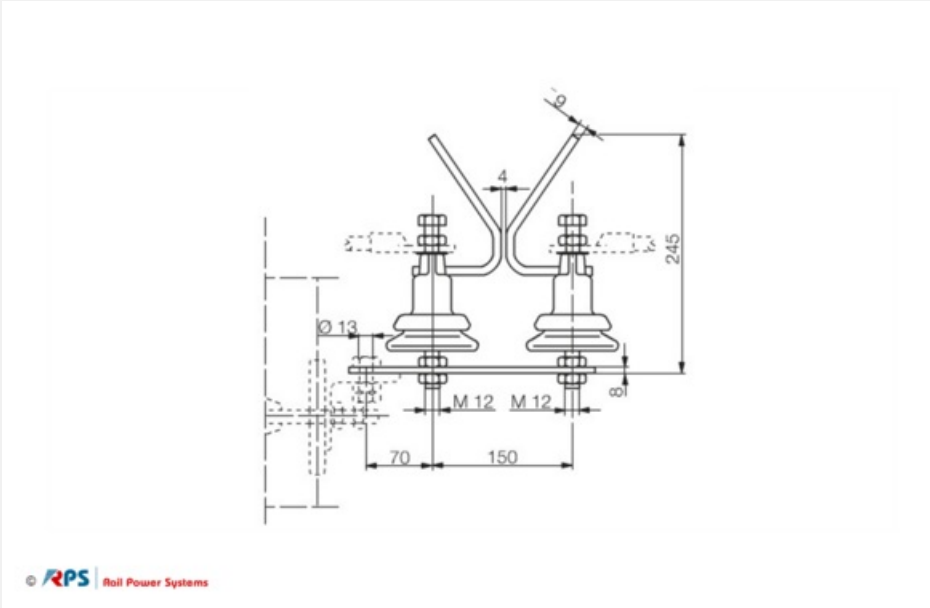
Material body/ shackle: G-CuSn



Material-ID	Name	Build Type	Weight	Drawing Number
3EGF002532	Voltage fuse	for rail S 49	1,7 kg	Ebs 15.13.18 a
3EGF002533	Voltage fuse	for rail S 64 and UIC 60	2,0 kg	Ebs 15.13.18 b

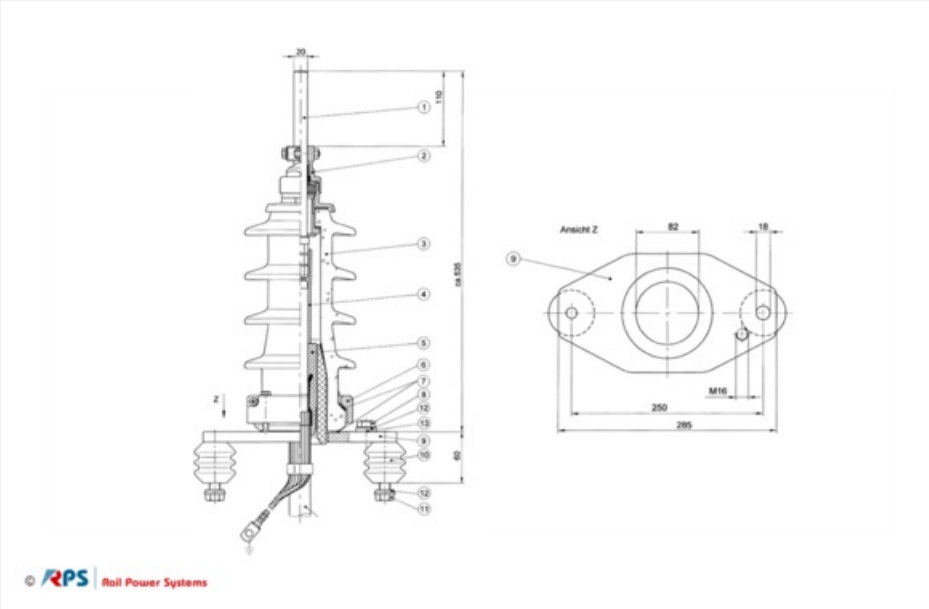
Lightning arrester 1.5 kV

For DC and AC overhead contact line systems, with cast resin insulator, cast iron cap and copper horns.



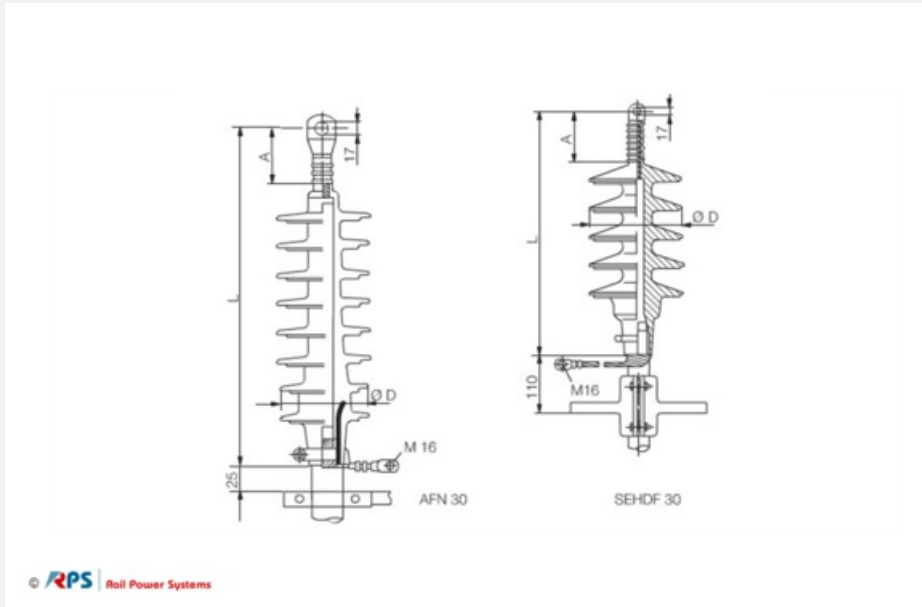
Material-ID	Name	Weight	Rated impulse withstand voltage	A	Drawing Number
3EGF008212	Horn gap lightning arrester	5,0 kg	1500 kV	4 mm	GVT3526015

Sealed Cable Termination (outdoor)



Material-ID	Name	Weight	Wire Size	Rated impulse withstand voltage	Drawing Number
3EGF002102	Cable termination	11,0 kg	240	30 kV	Ebs 09.31.11
3EGF002103	Cable termination	11,0 kg	150	30 kV	Ebs 09.31.11

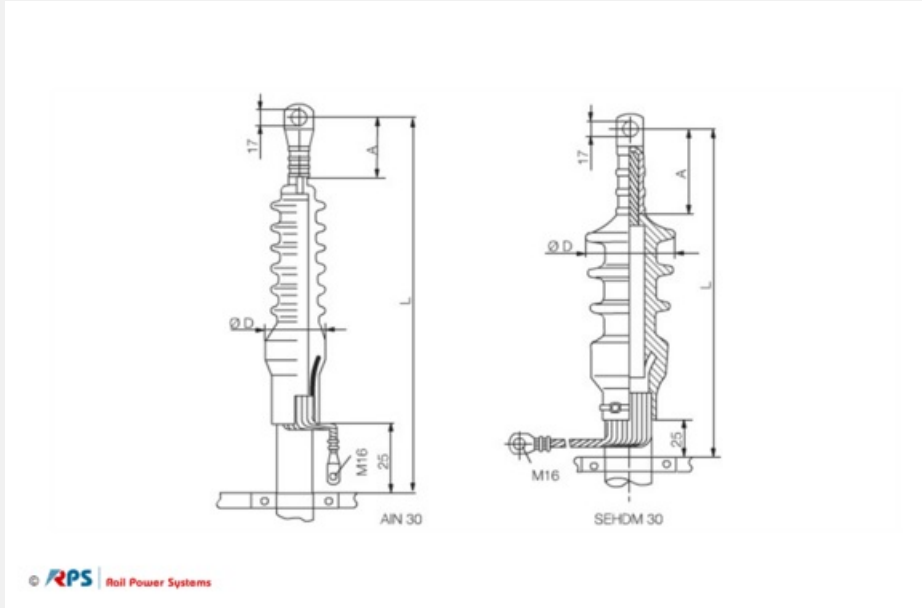
Sealed Cable Termination (outdoor)



Material-ID	Name	Build Type	A	L	Diameter	Wire Size	Drawing Number
3EGF002094	Cable termination	AFN 30	97 mm	439 mm	127 mm	240	Ebs 09.31.07
3EGF009615	Cable termination	AFN 30	83 mm	425 mm	127 mm	150	Ebs 09.31.07
3EGF009616	Cable termination	AFN 30	75 mm	417 mm	127 mm	120	Ebs 09.31.07
3EGF009617	Cable termination	AFN 30	57 mm	399 mm	115 mm	50	Ebs 09.31.07
3EGF009618	Cable termination	SEHDF 30	87 mm	437 mm	170 mm	120	Ebs 09.31.07
3EGF009619	Cable termination	SEHDF 30	95 mm	445 mm	170 mm	150	Ebs 09.31.07
3EGF009620	Cable termination	SEHDF 30	109 mm	459 mm	170 mm	240	Ebs 09.31.07

Cable Termination 30 kV (indoor)

for cable N2XS Y



Material-ID	Name	Build Type	A	L	Diameter	Wire Size	Drawing Number
3EGF009621	Cable termination	AIN 30	57 mm	329 mm	80 mm	50	Ebs 09.31.08
3EGF009622	Cable termination	AIN 30	75 mm	347 mm	83 mm	120	Ebs 09.31.08
3EGF002095	Cable termination	AIN 30	83 mm	365 mm	83 mm	150	Ebs 09.31.08
3EGF009624	Cable termination	SEHDM 30	69 mm	349 mm	105 mm	120	Ebs 09.31.08
3EGF009625	Cable termination	SEHDM 30	77 mm	357 mm	105 mm	150	Ebs 09.31.08
3EGF009626	Cable termination	SEHDM 30	91 mm	371 mm	105 mm	240	Ebs 09.31.08

